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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/369,767	08/06/1999	HARALD NEUMANN	10191/1146	7223

26646 7590 09/23/2002

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NEW YORK, NY 10004

EXAMINER
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OLSEN, KAJ K

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/369,767

Applicant(s)

NEUMANN, HARALD 

Examiner

Kaj Olsen

Art Unit

1744

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 August 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached discussion.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-22.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 8-20-2002 have been fully considered but they are not persuasive. Applicant urges that Kato is not analogous prior art, presumably because Kato does not discuss the problem of effectively blocking the coupling of the heater voltage. First the examiner points out that claim 1 specifies nothing concerning the blocking of heater voltage. Second Kato is clearly analogous prior art because it is drawn to an electrochemical sensor constructed with solid electrolytes.
2. Applicant continues to urge that Sone, Ohyama, Nakajima, or Kojima still do not cure the deficiencies of Kato with regards to the second electrode being coupled to ground. The examiner discussed this argument in paragraph 17 of the previous final rejection and will not refute that argument again here.
3. Applicant continues to assert that the examiner is improperly intermixing inherency with obviousness. This argument was addressed in paragraph 18 of the previous final rejection and the applicant has not set forth specifically what is improper about the combination of inherency and obviousness in that particular rejection. Specifying that a particular property of the sensor is inherent as a result of a modification that would have been obvious is not the same thing as saying a particular feature is both inherent and obvious at the same time.
4. Applicant continues to assert that Nakajima and Kojima fail to support the rejection involving electrodes of the same size. In particular, applicant urges that the examiner has not shown how these references support the rejection. However, how the rejection is supported is clearly shown by the figures and the figures are part of the reference's disclosure. Applicant's

Art Unit: 1744

arguments that there is no evidence that the drawings are to scale would appear to be irrelevant.

The examiner is not alleging the drawing is to scale, but rather that the issue of scale is irrelevant. The figures show two identical elements (i.e. the electrodes) to be in proportion to each other irrespective of the exact scale of the drawing.

5. With respect to Stahl, applicant's urge that the examiner is mistaken concerning whether Stahl is inherently negatively polarized when the oxygen exposed to the second electrode is greater than the oxygen exposed to the first electrode (as evidenced by Logothetis). In particular, applicant urges that the examiner is mistaken because the lower oxygen partial side electrode receives the electrons, the electrode on the measured gas side is the one that is negatively polarized. However, the position of the first and second electrodes of Stahl are reversed from that of the instant invention. That is, the "second electrode" of Stahl is the electrode exposed to the measuring gas while the "first electrode" is the reference electrode (see previous office actions for clarification of what elements of Stahl read on the claimed invention). This is the reverse of the arrangement of Kato and the instant invention (although the applicant has not claimed the electrodes in such a manner to read away from Stahl). Hence whereas the "first electrode" of the instant invention and Kato would be negatively polarized when the oxygen level of the measured gas is less than the oxygen level of the reference gas, the opposite would be true of Stahl because the electrodes are reversed. Conversely, when the oxygen level of the measured gas is greater than the oxygen level of the reference gas, the "first electrode" of Stahl would be negatively polarized. In addition, even if the examiner were incorrect in his analysis as the applicant alleges, then the applicant appears to be indicating that the opposite would thereby be true (namely that the "first electrode" would be negatively polarized when the oxygen level in

Art Unit: 1744

the measured gas would be less than the oxygen level in the reference gas). In this instance, the claims would still read on Stahl in an oxygen environment where there is less oxygen in the measurement gas than in the reference gas.

6. With respect to the teaching of Murase, applicant urges that Murase does not disclose coupling a second (reference) electrode to ground. Again, the examiner points out claims 1 and 13 (which are rejected with Murase) *only* specify the presence of a first and second electrode. The claims rejected over Murase never specify any electrode is a reference electrode.

7. The applicant's arguments concerning the "reference duct" of the claims were persuasive and the examiner has withdrawn the rejection of claims 9 and 12 in view of Murase (claims 9 and 12 remain rejected because of the rejection utilizing Kato).

8. With respect to the teaching of Liu, applicant traverses the rejection merely on the grounds that Kato, Ohyama, Kojima, Nakajima, and Sone are non-analogous. However, the references are clearly analogous to each other because they are all drawn to exhaust gas sensors constructed with solid electrolytes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (703) 305-0506. The examiner can normally be reached on Monday through Thursday from 8:30 AM-6:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Robert Warden, can be reached at (703) 308-2920.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications

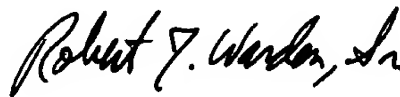
Art Unit: 1744

with the PTO that are not for entry into the file of this application. This will expedite processing of your papers. The fax number for non-after final communications is (703) 872-9310 and the fax number form after-final communications is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0661.



Kaj K. Olsen  
Patent Examiner  
AU 1744  
September 16, 2002



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